

## **Programme of study for handling data and statistics**

statutory requirements in bold, suggested steps in faint, adult curriculum in green

### **Handling Data**

**Note:** Handling data does not appear in the formal National Curriculum until statistics appears in step 8 of the Westfield Curriculum. However, elements of number and place value should be used to include examples of ‘counting’ to introduce the concept of bar and tally charts, as well as ‘sorting and grouping objects’ in measurement. All objectives in green are equally relevant for younger learners’ development.

### **Step 5**

HD1/M4.1 Anticipate, follow and join in familiar activities when given contextual cues

HD1/M4.2 Demonstrate awareness of cause and effect in familiar activities such as by hitting a mathematical shape on the concept keyboard to make it appear on the screen

HD1/M4.3 Demonstrate an awareness of changes in

Shape, size, quantity, position

HD1/M5.1 With some inconsistencies and support, group objects according to a single given criterion, including by size and shape

HD1/M5.2 With some inconsistencies and support, make simple sets which are equivalent such as by stacking chairs into pairs or twos

HD1/M5.3 With some inconsistencies and support, make simple sets which are corresponding such as by putting chairs into a set by their function or matching images to actual objects

**Construct simple pictograms, tally charts, block diagrams and simple tables**

**Interpret simple pictograms, tally charts, block diagrams and simple tables**

HD1/M6.1 Identify when an object is different in that it does not belong in a given category

**HD1/M6.2** With support, copy simple patterns, including those involving

Numbers, shapes, symbols, signs, colours

**HD1/M6.3** With support, follow and repeat simple sequences of up to three steps, including those involving

Numbers, shapes, symbols, signs, colours

## **Step 6**

**HD1/M7.1** Create numerically ordered lists

1. of up to three items
2. with some inconsistencies, when working with up to five items

**HD1/M7.2** With some inconsistencies, group objects into sets, using a single given criterion when working with up to five objects, including

1. size
2. shape
3. colour

**HD1/M7.3** Identify objects and materials by a single given criterion, when the difference is marked, including

1. size
2. shape
3. colour

**HD1/M7.4** Identify the odd one out in a familiar collection using a single given criterion, including

1. shape
2. size

3. quantity

**HD1/M7.5** Solve given problems involving numbers up to three with support, up to five

**Answer simple questions by counting the number of objects in each category**

## **Step 7**

**HD1/M8.1** Recognise, describe and create lists of up to five items that are ordered

1. numerically
2. alphabetically
3. by pattern or sequence

**HD1/M8.2** Sort objects by a single criterion, including

1. outline shape
2. size
3. weight
4. quantity
5. colour
6. function from collections of up to five objects and with support, up to 10 objects

**HD1/M8.3** Use simple representations or diagrams for counting numbers up to 10 such as a number line

**HD1/M8.4** Solve given problems involving numbers

1. up to five
2. with support, up to 10

**HD1/M8.5** Estimate, and check by counting, numbers

1. up to five
2. with support, up to 10 such as when estimating the number of people in a group

## **Step 8 Data and statistics**

**Pupils should be taught to:**

- interpret and construct simple pictograms, tally charts, block diagrams and simple tables
- ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity
- ask and answer questions about totaling and comparing categorical data.

**HD1/E2.1** Extract information from lists, tables, simple diagrams and block graphs

**HD1/E2.2** Make numerical comparisons

**HD1/ E2.3** Sort and classify objects using two criteria

**HD1/E2.4** Collect simple numerical information

**HD1/E2.5** Represent information so that it makes sense to others e.g. lists, tables and diagrams

## **Step 9**

**Pupils should be taught to:**

- interpret and present data using bar charts, pictograms and tables
- solve one-step and two-step questions [for example, ‘How many more?’ and ‘How many fewer?’]

**HD1/E3.1** Extract information from lists, tables, simple diagrams and simple charts

**HD1/E3.2** Make numerical comparisons from bar charts and picture grams

**HD1/ E3.3** make observations and record information using a tally

**HD1/E3.4** Organise and represent information in different so that it makes sense to others

## **Step 10**

**Pupils should be taught to:**

- interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.
- solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.